

same angle of obliquity with scarcely any change throughout the ray. One of the lineal series at the base of the ray contains about fifteen or sixteen sacculi in a line, which are closely placed and often touch one another. The sacculi diminish in size as they proceed along the ray, and midway between the centre and the extremity there are about six or seven in a row. The series of rows are separated from adjacent rows by a well-defined space, nearly as broad as the row of sacculi. The interrarial sulcus, above mentioned, is emphasised and almost arched over by the row of sacculi on each side. As these two rows pass over the margin, they recede gradually from the median line as they approach the adambulacral plates, in consequence of which a wedge-shaped naked area occurs along the interrarial region on the actinal surface, extending between the mouth-plates and the margin, where it narrows into the sulcus that proceeds along the abactinal surface. Sometimes one or two sacculi may be present on each side of the median line a short distance behind the mouth-plates.

The armature of the adambulacral plates is arranged in obliquely transverse semi-circular curves, and consists near the inner end of the furrow of about six spinelets, the outermost being longest and the rest decreasing gradually in size as they approach the inner or aboral end of the series, and all are united by membrane which is deeply indented between the two outer spinelets, and to a less degree between the others. On the outer part of the ray the number of spinelets is reduced to five or four. The inner two or three spinelets are minute, and stand close together on that part of the semicircle which traverses the furrow-margin of the plate, the curvature of the base line of the fan having its convexity directed adorally. The longest spinelets have a tendency to radiate outward, and the adambulacral plates present a slight angular prominence into the furrow.

The mouth-plates are large and prominent, with a rounded elevated ridge along their line of junction, terminating aborally in a moderately prominent peak. The plates have broad lateral expansions, the adoral margin being nearly as long as the median suture; they protrude but slightly into the margin of the actinostome, and there is only a feebly-developed peak at the adoral extremity of the median juncture. The armature consists of three or four short, cylindrical mouth-spines placed on the horizontal margin of each plate, united by membrane and directed towards the interrarial line, the innermost spine being the longest. Immediately succeeding the mouth-spines are three small spinelets situated at the angle of the plate most remote from the median line of juncture; the innermost stands close to the mouth-spines and might be counted as one of that series, except that it is not connected with them by membrane as the others are; the other two spines are behind, and form with the one just mentioned a semicircular curve at the rounded angle of the mouth-plate, suggestive of an incipient adambulacral armature. These spines, however, are much smaller, and though covered with membrane are not united. Upon the surface of each plate, near the median elevation, are borne two